

MEG Experimental Design

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Stimulus Creation



- Using Auditory Experiments as an example
 - Synthesized vs. Natural vs. Hybrid stimulus
 - Pros and Cons?

Design Comparison

- Finding the best control condition/group is the most important yet easy to overlook aspect!
 - Tied to research questions

Research Questions

- How many can you address in one experiment?
 - Depending on your population (adult vs. infant vs. children)
 - Depending on your analysis and targeted effect (strong vs. weak effect, lots of signal processing vs. little signal processing?)

Implement Checks

- Crucial to have check points!
 - Human errors are inevitable
 - For example, never randomize trials on the fly!
 - Have copies that you can go back and check triggers.

Discussion

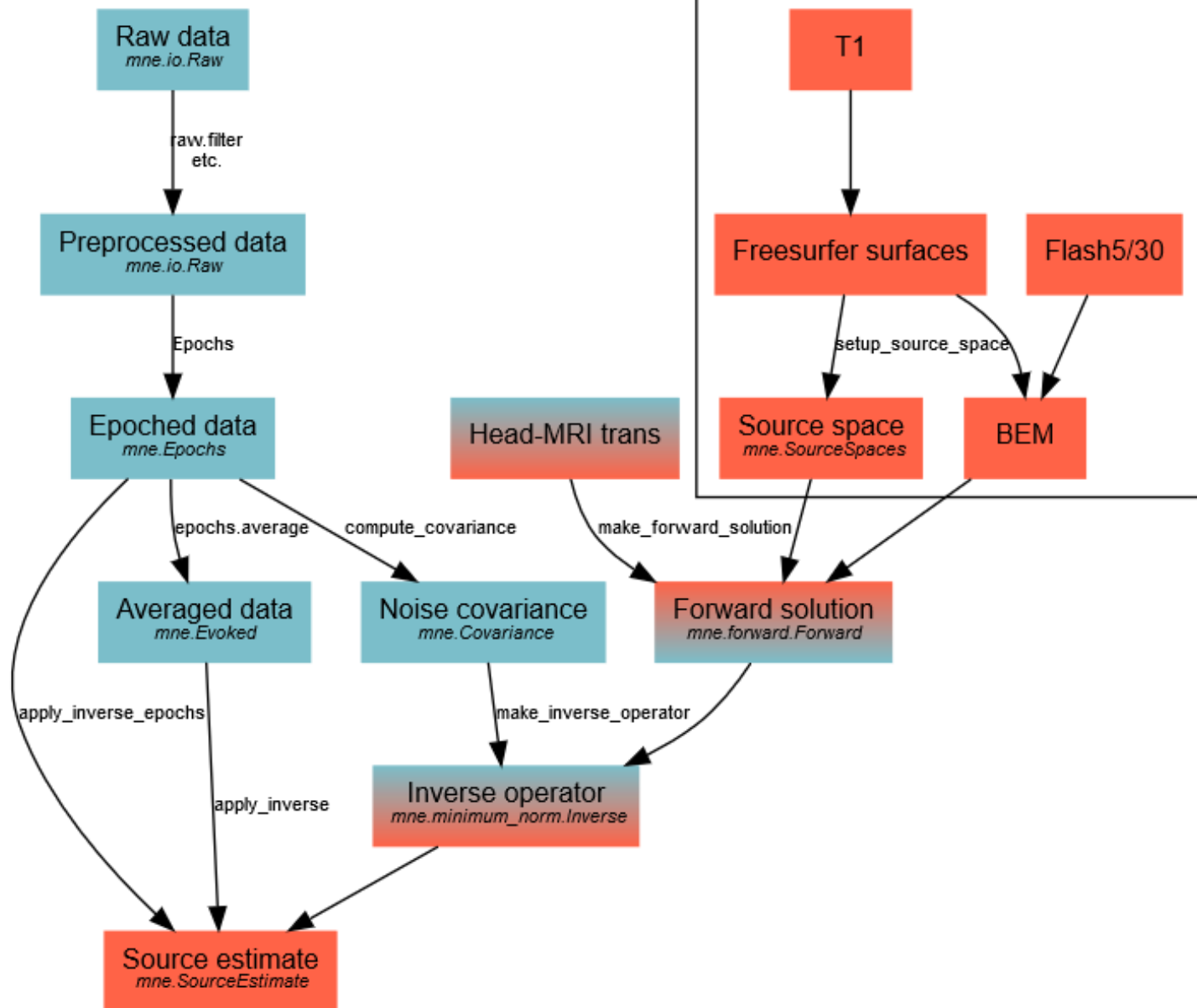
- What is a current or potential MEG experiment for you?

MEG Data Analysis

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MNE Python Examples



- Mne python:
 - <https://martinos.org/mne/stable/index.html>
 - Examples